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On a collection of Pterophoridae (Lepidoptera) from Haut-Katanga, Democratic Republic of the Congo

Cees GIELIS
Mr. Haafkensstraat 36, NL- 4128 CJ Lexmond, The Netherlands.
C.Gielis@net. hcc.nl

On a collection of Pterophoridae (Lepidoptera) from Haut-Katanga, Democratic Republic of the Congo. - Between 1929 and 1932, 33 species of Pterophoridae were collected in Haut-Katanga, Democratic Republic of the Congo, by Jean Romieux of Geneva, Switzerland. From these, eight turned out to be new and are here described as: *Platyptilia romieuxi*, *P. rubriacuta*, *Sphenarches bifurcatus*, *Exelastis pilum*, *Stenodacma cognata*, *Hellinsia katangae*, *H. bengtssoni*, and *H. punctata*. *Oidaematophorus madecasseus* Gibeaux, 1994 is recognized as a junior synonym of *Adaina microdactyla* (Hübner, [1813]).

Keywords: Afrotropical - Democratic Republic of the Congo - Katanga - Lepidoptera - Pterophoridae - new species.

INTRODUCTION

Recently the Pterophoridae (Lepidoptera) collection of the Geneva Muséum d'histoire naturelle was brought to my attention by Lepidoptera curator Bernard Landry. It turned out to contain a valuable collection of specimens from Haut-Katanga, Democratic Republic of the Congo. Most of the specimens were unidentified and had been collected by Jean Romieux of Geneva between 1929 and 1932. Eight new species were found and they are described here. Specimens are placed in the MHNG, unless otherwise indicated. The classification follows Gielis (1993).

Born in 1893, Jean Romieux obtained his doctorate of sciences in Geneva in 1932. He was destined to become an engineer and prospector. He was a passionate lepidopterist and a member of the Lepidopterological Society of Geneva since 1919. He collected Lepidoptera of all sizes in Switzerland, but also where his professional duties took him, such as Brazil, Laos, the Democratic Republic of the Congo, and Turkey. Most of his specimens were deposited in the MHNG and his Haut-Katanga material yielded new species in several Lepidoptera families. He died in Marseille, France, in 1951 (Rehfous, 1952).

The Democratic Republic of the Congo has been surveyed by investigators from Belgium, for example by: Ch. Seydel, J. Ghesquière, M. Fontaine and R.P. Hulstaert. They have collected mainly around the cities they were stationed: Elisabethville (= Lubumbashi), Stanleyville (= Kisangani), Eala and Leopoldville (= Kinshasa). The specimens they collected have been deposited in the Royal Museum for Central Africa, in Tervuren, Belgium. The collection of this museum has been

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examined by Bigot (1969), who recognized 21 species from the province of Katanga. Some of the specimens have been identifyed by Meyrick, but were not published. The author has neither knowledge of additional collecting in Katanga, nor of publications on this region.

In his World Catologue of Pterophoroidea, Gielis (2003), mentions 24 species from the Democratic Republic of the Congo. He also lists from surrounding countries: Uganda 16, Rwanda 2, Burundi 1, Tanzania 39, Zambia 1 and from Angola no species. These low numbers of known species in the Central African region are illustrative for the under sampling and our lack of knowledge from the region and underline the importance of the Jean Romieux collection.

ABBREVIATIONS

CG	Dr. Cees Gielis, Lexmond, The Netherlands.
Gent. prep.	Genital preparation.
MHNG	Muséum d'Histoire Naturelle de Genève, Switzerland.
NHMO	Natural History Museum, University of Oslo, Norway.
TL	Type locality.
ZMUC	National Zoological Museum, University of Copenhagen, Denmark.

RESULTS

Deuterocopus deltoptilus Meyrick, 1930 Fig. 1

Deuterocopus deltoptilus Meyrick, 1930: 565. TL: Uganda.

MATERIAL: 1 ♂, Haut-Katanga, Panda, 22.II.[19]30, Gent. prep. Gielis 5861.

REMARKS: Known from Uganda, Kenya and Nigeria.

Platyptilia benitensis Strand, 1912 Fig. 2

Platyptilia benitensis Strand, 1912: 64. TL: Cameroun.

MATERIAL: 2 ♂♂, Haut-Katanga, Tshinkolobwe, 14.IV.[19]31, 26.I.[19]31. – 1 ♂, Haut-Katanga, Panda, 1.XI.[19]29. – 1 ♀, Haut-Katanga, Tantara, 19.VII.[19]31.

REMARKS: Known from Nigeria, Cameroun, Uganda, Kenya, Tanzania, São Tomé Islands and Rep. of S. Africa.

Platyptilia romieuxi sp. n. Figs 3-4

MATERIAL: Holotype ♀, '[Democratic Republic of the Congo] Ht Katanga | Tshinkolobwe | 8.6.[19]31 | J. Romieux', 'MHNG ENTO 00005544', 'Gent. prep. | Gielis | Nr. 5857', 'HOLOTYPE | Platyptilia | romieuxi | Gielis (red label)' (MHNG). – Paratype (blue label): 1 ♀, same data except 15.9.[19]30 (CG).

DIAGNOSIS: The species is characterized by the bright wing pattern and the shape of the spine on the ostium in the female genitalia, which separates it from other species in the genus.

DESCRIPTION: Wingspan 18-21 mm. Head appressedly scaled, pale ochreous-brown, with a frontal conus of scales of 2/3rd of eye-diameter. Labial palpus pale ochreous-brown, protruding, twice the eye-diameter. Antenna alternately ringed brown and ochreous-brown, shortly ciliated. Thorax and tegula pale ochreous-brown, rostrally

FIG. 1
Deuterocopus deltoptilus Meyrick. Imago. Ht. Katanga, Panda, 22.II.[19]30, J. Romieux.

FIG. 2
Platyptilia benitensis Strand. Imago. Ht. Katanga, Tshinkolobwe, 14.IV.[19]31, J. Romieux.

FIG. 3
Platyptilia romieuxi sp. n. holotype. Imago. Ht. Katanga, Tshinkolobwe, 8.VI.[19]31, J. Romieux.

darker. Mesothorax grey-white. Abdomen ochreous-brown and dark brown. Legs ochreous-white, with brown scale bristle at base of spurs and terminally on first tarsal segment.

Fore wing cleft from 7/10th; ochreous-brown; markings dark brown as a discal spot, a dorsal spot at 1/8th, costal triangle just before base of cleft, a costal streak in middle of first lobe, and a subterminal field in both lobes. Along costa of first lobe with four small pale spots, and pale subterminal line marginal to subterminal dark field. Fringes pale ochreous, with basal row of dark brown scales terminally and around apices and anal angle of both lobes. Two scale-teeth along the dorsum at 2/3rd and 3/4th, and with some scattered scales; with scattered scales in cleft. Underside brown, with whitish spots terminally from the costal triangle; with four small spots at costa and subterminal line as upperside.

Hind wing and fringes grey-brown. First and second lobe with a line in fringes around apex; apex of third lobe with a small group of scales, and with scattered brown scales along dorsum with large scale-tooth in middle. Underside brown. Venous scales dark ferruginous, in a double row, costal row longer.

MALE GENITALIA: Unknown.

FEMALE GENITALIA: Ostium with distinct small spike on left side. Antrum ten times longer than wide, moderately sclerotized. Ductus bursae 2/3rd of antrum. Ductus seminalis from tip of bursa copulatrix. Bursa copulatrix vesicular, with a pair of

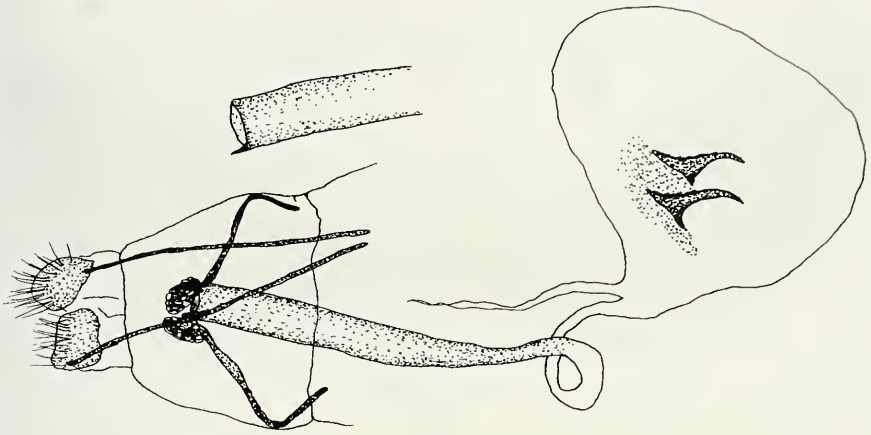

FIG. 4

Platyptilia romieuxi sp. n. holotype. Female genitalia. Ht. Katanga, Tshinkolobwe, 8.VI.[19]31, J. Romieux, Gent. prep. Gielis 5857.

curved, horn-like signa. Lamina postvaginalis with sclerotized ridge, centrally with two small plates. Apophyses anteriores longer than papillae anales. Apophyses posteriores 4-5 times papillae anales.

ECOLOGY: The moth flies in June and September. The host plant is unknown.

DISTRIBUTION: Democratic Republic of the Congo, Haut-Katanga.

ETYMOLOGY: The species is named after the collector, Mr. J. Romieux, who compiled a very thorough collection from this remote area.

Platyptilia picta Meyrick, 1913 Fig. 5

Platyptilia picta Meyrick, 1913: 109. TL: Kenya.

MATERIAL: 1 ♂, Haut-Katanga, Tantara, 19.VII.[19]31, Gent. prep. Gielis 5858 (MHNG). – 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 18.III.[19]31, 2.IV.[19]31, Gent. prep. Gielis 5825 (♀) (MHNG, CG).

REMARKS: Known from Kenya and Rep. of S. Africa.

Platyptilia rhyncholoba Meyrick, 1924 Fig. 6

Platyptilia rhyncholoba Meyrick, 1924: 1. TL: Rwanda.

MATERIAL: 1 ♀, Haut-Katanga, Sakania, 7.XII.[19]31, Gent. prep. Gielis 5853.

REMARKS: Known from DR Congo, Rwanda, Kenya and Tanzania.

Platyptilia locharcha Meyrick, 1924 Fig. 7

Platyptilia locharcha Meyrick, 1924: 94. TL: Zimbabwe.

MATERIAL: 4 ♂♂, Haut-Katanga, Sakania, 12.I.[19]32, 19.I.[19]32, 10.XII.[19]31, 31.XII.[19]31, Gent. prep. Gielis 5822, 5856 (MHNG, CG).

REMARKS: Known from Zimbabwe. So far only the type series was known.

FIG. 5
Platyptilia picta Meyrick. Imago. Ht. Katanga, Tantara, 19.VII.[19]31, J. Romieux.

FIG. 6
Platyptilia rhyncholoba Meyrick. Imago. Ht. Katanga, Sakania, 7.XII.[19]31, J. Romieux.

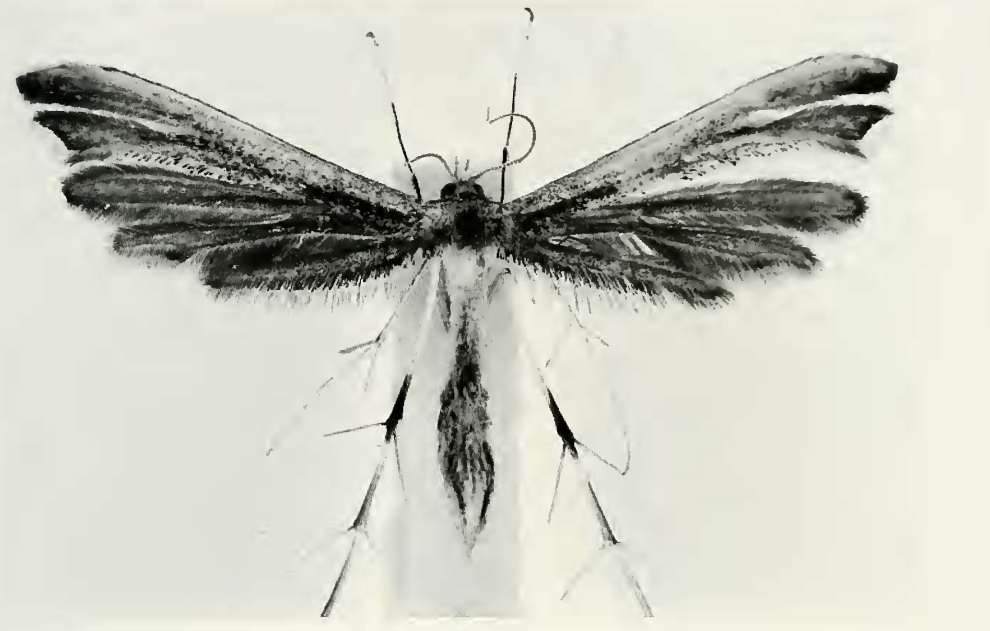

FIG. 7
Platyptilia locharcha Meyrick. Imago. Ht. Katanga, Sakania, 19.I.[19]32, J. Romieux.

Platyptilia rubriacuta sp. n. Figs 8-9

MATERIAL: Holotype ♂, '[Democratic Republic of the Congo] Ht Katanga | Sakania | 24.12.[19]31 | J. Romieux', 'MNHG ENTO 00005545', 'HOLOTYPE | Platyptilia | rubriacuta | Gielis' (red label) (MHNG). – Paratypes (blue label): 2 ♂♂, Sakania, 24.12.[19]31, J. Romieux, Gent. prep. Gielis 5823, 5859 (MHNG, CG).

DIAGNOSIS: The species is characterized by the fore wings with acute tips, and the male genital structure with the spade-like valves, the blunt uncus, and the wide and elongated saccus.

DESCRIPTION: Wingspan 24-27 mm. Head appressedly scaled, pale ferruginous-ochreous. Labial palpus protruding, ferruginous-ochreous, as long as eye-diameter. Antenna ringed, ferruginous-ochreous and brown. Thorax, tegula, and mesothorax pale ferruginous-ochreous; caudal part of thorax and tegula darker tinged. Abdominal segments 1 and 2 ochreous, segments 3 to 5 laterally ochreous and dorsally greyish; segments 6 to 9 greyish, dorsally darker grey. Legs pale ochreous, at base of spurs with some ferruginous scales forming small bristle.

Fore wing cleft from 2/3rd, ferruginous. First lobe acutely tipped, second lobe with indication of a termen. Costal with line of ochreous scales. Fringes grey-brown; Brown at anal and apical region of both lobes; along dorsum and terminal region of second lobe a continuous, basal row of white scales, interrupted in anal region by brown scales; in cleft and towards tip of first lobe also with basal scales but ferruginous of co-

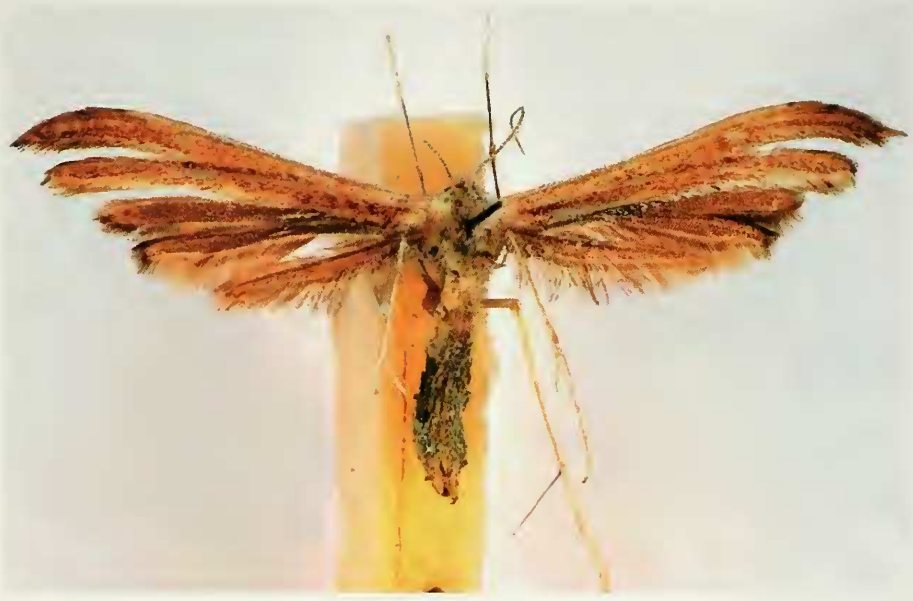

FIG. 8
Platyptilia rubriacuta sp. n. Holotype. Imago. Ht. Katanga, Sakania, 24.XII.[19]31, J. Romieux.

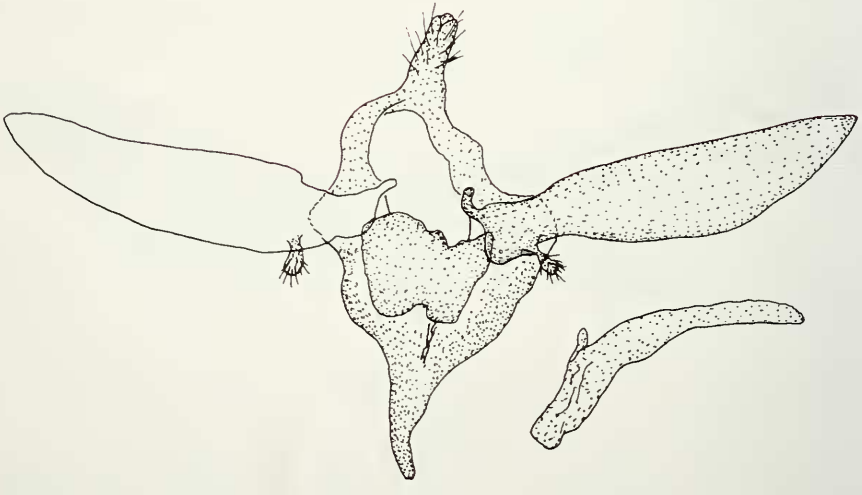

FIG. 9
Platyptilia rubriacuta sp. n. paratype. Male genitalia. Ht. Katanga, Sakania, 24.XII.[19]31, J. Romieux, Gent. prep. Gielis 5859.

lor. Underside ferruginous-brown.

Hind wing and fringes ferruginous-brown. Along dorsum of third lobe an irregular row of basal, ferruginous, and occasionally white, scales. Underside ferruginous-brown. Venous scales dark ferruginous, in double row, costal row longer.

MALE GENITALIA: Valvae symmetrical. Valve lanceolate, with basal, saccular small process. Tegumen arched. Uncus simple. Anellus arms short. Saccus in shape of large triangular plate. Phallus slightly arched, without cornuti.

FEMALE GENITALIA: Unknown.

ECOLOGY: The moth flies in December. The host plant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga.

ETYMOLOGY: The name is composed from *ruber* (= red colored) and *acuta* (= sharp pointed), and reflects the reddish color and the acute tips of the fore wing lobes.

Lantanophaga pusillidactylus (Walker, 1864) Fig. 10

Oxyptilus pusillidactylus Walker, 1864: 933. TL: Jamaica.
Platyptilia tecnidion Zeller, 1877: 13.
Platyptilia hemimetra Meyrick, 1886: 18.
Platyptilia lantana Busck, 1914:
Platyptilia teleacma Meyrick, 1932: 250.
Platyptilia lantanadactyla Amsel, 1951: 66.

MATERIAL: 1 ♀, Haut-Katanga, Tshinkolobwe, 21.I.[19]31.

REMARKS: Recorded hostplants in following families: Asteraceae, Euphorbiaceae, Lamiaceae, Lentibulariaceae, and Verbanaceae (Matthews & Lott, 2005).

Known from the tropical and subtropical zone of all faunistical regions.

Stenoptilodes taprobanes (Felder & Rogenhofer, 1875) Fig. 11

Amblyptilia taprobanes Felder & Rogenhofer, 1875: plate 140, fig. 54. TL: Sri Lanka.
Platyptilia brachymorpha Meyrick, 1888: 240.
Platyptilia seeboldi Hofmann, 1898: 33.
Platyptilia terlizzii Turati, 1926: 67.
Platyptilia monotrigona Diakonoff, 1952: 15..
Amblyptilia zavatterii Hartig, 1953: 67.
Platyptilia legrandi Bigot, 1962: 86.
Stenoptilodes vittata Service, 1966: 11.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 7.X.[19]30, 10.XI.[19]30. – 1 ♂, Haut-Katanga, Kamwale, 13.I.[19]30. – 1 ♂, Haut-Katanga, Panda, 18.II.[19]30. – 1 ♂, Haut-Katanga, Sakania, 11.XII.[19]31.

REMARKS: Recorded hostplants are in following families: Acanthaceae, Asteraceae, Caryophyllaceae, Ericaceae, Gentianaceae, Hydroleaceae, Lamiaceae, Orobanchaceae, Plantaginaceae, Scrophulariaceae, and Theophrastaceae (Matthews & Lott, 2005).

Known from the tropical and subtropical zone of all faunistical regions.

Stenoptilia zophodactylus (Duponchel, 1838) Fig. 12

Pterophorus zophodactylus Duponchel, 1840: 668. TL: France.
Pterophorus loewii Zeller, 1847: 38.
Pterophorus canalis Walker, 1864: 944.
Mimeseoptilus semicostata Zeller, 1873: 323.

FIG. 10
Lantanophaga pusillidactylus (Walker). Imago. Ht. Katanga, Tshinkolobwe, 21.I.[19]31, J. Romieux.

MATERIAL: 1 ♀, Haut-Katanga, Tshinkolobwe, 10.III.[19]31, Gent. prep. Gielis 5832.

REMARKS: Recorded hostplants are in the following families: Asteraceae, Gentianaceae, Orobanchaceae, and Plantaginaceae (Matthews & Lott, 2005).

Known from the tropical and temperate zone of all faunistical regions.

Stenoptilia bandamae Bigot, 1964 Fig. 13

Stenoptilia bandamae Bigot, 1964: 113. TL: Côte d'Ivoire.

MATERIAL: 1 ♀, Haut-Katanga, Tshinkolobwe, 19.X.[19]30 (CG). – 1 ♂, Haut-Katanga, Tshinkolobwe, 27.VIII.[19]30, Gent. prep. Gielis 5829 (MHNG).

REMARKS: So far only known from the holotype, from Côte d'Ivoire.

Xyroptila masaia Kovtunovich & Ustjuzhanin, 2006 Figs 14

Xyroptila masaia Kovtunovich & Ustjuzhanin, 2006: 257. TL: Kenya.

MATERIAL: 1♂, Haut-Katanga, Panda, 12.II.[19]30. – 1♂, Haut-Katanga, Tshituru, 19.V.[19]29, prep. MNHG 2911. – 1♂, Haut-Katanga, Tshinkolobwe, 22.XI.[19]30.

REMARKS: Known from Kenya, Zambia and Zimbabwe.

FIG. 11
Stenoptilodes taprobanes (Felder & Rogenhofer). Imago. Ht. Katanga, Tshinkolobwe, 10.XI.[19]30, J. Romieux.

FIG. 12
Stenoptilia zophodactylus (Duponchel). Imago. Ht. Katanga, Tshinkolobwe, 10.III.[19]31, J. Romieux.

FIG. 13
Stenoptilia bandamae Bigot. Imago. Ht. Katanga, Tshinkolobwe, 19.X.[19]30, J. Romieux.

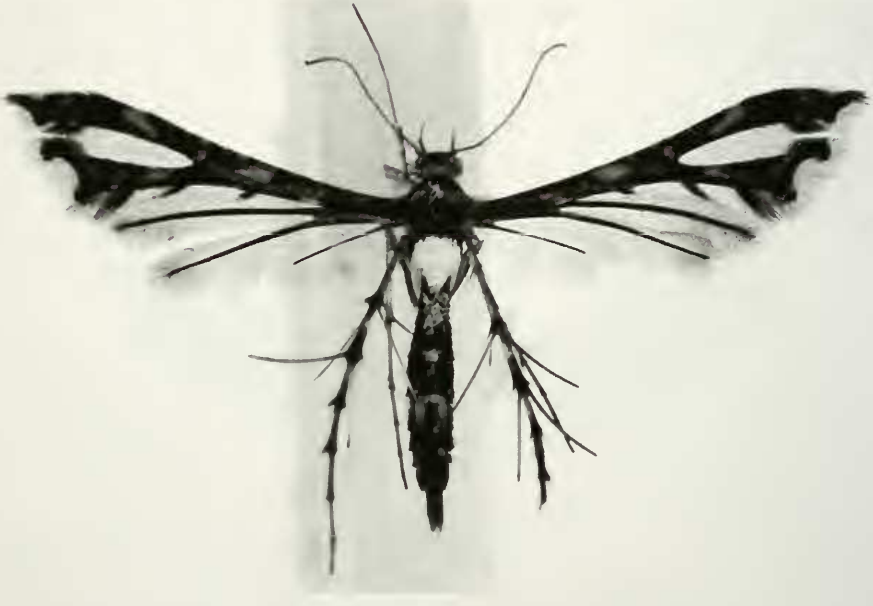

FIG. 14
Xyroptila masaia Kovtunovitch & Ustjuzhanin. Imago. Ht. Katanga, Panda, 12.II.[19]30, J. Romieux.

Amblyptilia direptalis (Walker, 1864) Fig. 15

Oxyptilus direptalis Walker, 1864: 934. TL: Republic of South Africa.
Platyptilia amblydectis Meyrick, 1932: 108.

MATERIAL: 1 ♂, 2 ♀♀, Haut-Katanga, Tshinkolobwe, 5.I.[19]31, 27.I.[19]31, 30.I.[19]31, Gent. prep. Gielis 5824 (♂). – 1 ♂, Haut-Katanga, Panda, 6.I.[19]30.

REMARKS: Recorded hostplants are in the Lamiaceae and Plantaginaceae (Matthews & Lott, 2005).

Known from Ethiopia, Kenya, Tanzania and Rep. of S. Africa.

Sphenarches bifurcatus sp. n. Figs 16-17

MATERIAL: Holotype ♀, '[Democratic Republic of the Congo] Ht Katanga | Tshinkolobwe | 26.1.[19]31 | J. Romieux', 'MHNG ENTO 00005513', 'Gent. prep. | Gielis | nr. 5835', 'HOLOTYPE | Sphenarches | bifurcatus | Gielis' (red label) (MHNG).

DIAGNOSIS: The species is characterized by the distinct long tubular antrum, and the lamina antevaginalis with two caudal extensions.

DESCRIPTION: Wingspan 15 mm. Head appressedly scaled, grey-brown; grey-white between eyes. Collar with erect, bifid scales. Labial palpus grey-brown, slender, protruding, twice eye-diameter. Antenna grey-brown, with longitudinal row of whitish scales, shortly ciliated. Thorax and tegula rostrally pale orange-brown, caudally densely mixed with whitish scales. Mesothorax greyish-white. Abdomen pale brown-orange, rostral segments mixed dark brown. Legs grey-white; segments before spurs with mix of dark brown scales, thickened to a brush around base of spurs.

Fore wing cleft from 5/12th; pale brown-orange. First lobe acute, second lobe with sinuate termen. With brown spots in discus and at costal side of base of cleft; brown scales along costa in shape of three longitudinal spots in first lobe. With faint subterminal line in both lobes. Fringes grey, ochreous-white at anal and costal angles; mixed with black scales, particularly in cleft and at dorsum. Underside pale brown-orange, with subterminal white line as upperside.

Hind wing orange-brown. Fringes of first and second lobe grey-brown; of third lobe grey. Third lobe with subterminal, black scale tooth, and some black scales at apex and along costa and dorsum, also with scattered white scales along dorsum. Underside pale brown-orange. Venous scales ferruginous, in double row, dorsal row longer and extending into second lobe.

MALE GENITALIA: Unknown.

FEMALE GENITALIA: Ostium mildly curved. Antrum tube-like, seven times longer than wide. Ductus bursae narrow, long. Ductus seminalis from the tip of the bursa copulatrix. Bursa copulatrix vesicular, with a dense spiculation in the lower 2/3rd. Lamina ante-vaginalis prominently bifurcate. Apophyses anteriores absent. Apophyses posteriores three times length of papillae anales.

ECOLOGY: The only known specimen was flying in January. The hostplant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga.

ETYMOLOGY: The name *bifurcatus* (= forked twice) reflects the extended, forked shape of the 7th female sternite and indented ostium.

FIG. 15
Amblyptilia direptalis Meyrick. Imago. Ht. Katanga, Tshinkolobwe, 27.I.[19]31, J. Romieux.

FIG. 16
Sphenarches bifurcatus sp. n. holotype. Imago. Ht. Katanga, Tshinkolobwe, 26.I.[19]31, J. Romieux.

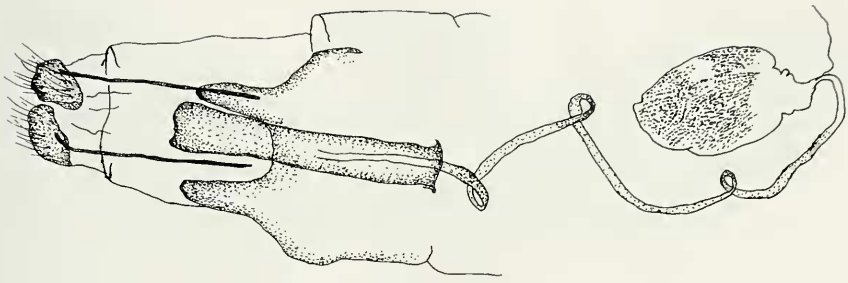

FIG. 17

Sphenarches bifurcatus sp. n. holotype. Female genitalia. Ht. Katanga, Tshinkolobwe, 26.I.[19]31, J. Romieux, Gent. prep. Gielis 5835.

Exelastis phlyctaenias (Meyrick, 1911) Fig. 18

Marasmarcha phlyctaenias Meyrick, 1911: 106. TL: Sri Lanka.

MATERIAL: 2 ♂♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 22.VIII[19]31, 23.VIII.[19]30, 1.XI.[19]30, Gent. prep. Gielis 5827 (♂). – 1 ♀, Haut-Katanga, Kyala, 4.IX.[19]29; 1 ♀, Ht. Katanga, no locality, no date.

REMARKS: Recorded hostplants are in the Anacardiaceae and Fabaceae (Matthews & Lott, 2005).

Known from Philippines, Sri Lanka, Ethiopia, Tanzania, Malawi, Rep. of S. Africa, Madagascar, Réunion Island and the Virgin Islands. The species seems to be distributed by man.

Exelastis pumilio (Zeller, 1873) Fig. 19

Mimeseoptilus pumilio Zeller, 1873: 324. TL: USA (Tx).
Marasmarcha liophanes Meyrick, 1886: 19.
Mimaesoptilus gilvidorsis Hedemann, 1896: 8 [not Zeller, 1877].

MATERIAL: 2 ♂♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 16.IV.[19]31, 12.IX.[19]30, no date, Gent. prep. Gielis 5828 (♂) (MHNG, CG). – 1 ♂, Haut-Katanga, Panda, 12.VI.[19]29 (MHNG).

REMARKS: Recorded hostplants are in the following families: Asteraceae, Fabaceae, and Oxallidaceae (Matthews & Lott, 2005).

Known from the tropical and subtropical zone of all faunistical regions.

Exelastis vuattouxi Bigot, 1970 Fig. 20

Exelastis vuattouxi Bigot, 1970: 761. TL: Côte d'Ivoire.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 25.IX.[19]30, 29.IX.[19]30, Gent. prep. Gielis 5852 (♂).

REMARKS: Known from Nigeria, Côte d'Ivoire, Ghana and Tanzania.

Exelastis pilum sp. n. Figs 21-22

MATERIAL: Holotype ♂, '[Democratic Republic of the Congo] Ht Katanga | Tantara | 10.10.[19]31 | J. Romieux' , 'MHNG ENTO 00005521' , 'Gent. prep. | Gielis | nr. 5830' , 'HOLOTYPE | Exelastum | pilum | Gielis' (red label) (MHNG).

FIG. 18
Exelastis phlyctaenias Meyrick. Imago. Ht. Katanga, Tshinkolobwe, 23.VIII.[19]30, J. Romieux.

FIG. 19
Exelastis pumilio Zeller. Imago. Ht. Katanga, Tshinkolobwe, 16.IV.[19]31, J. Romieux

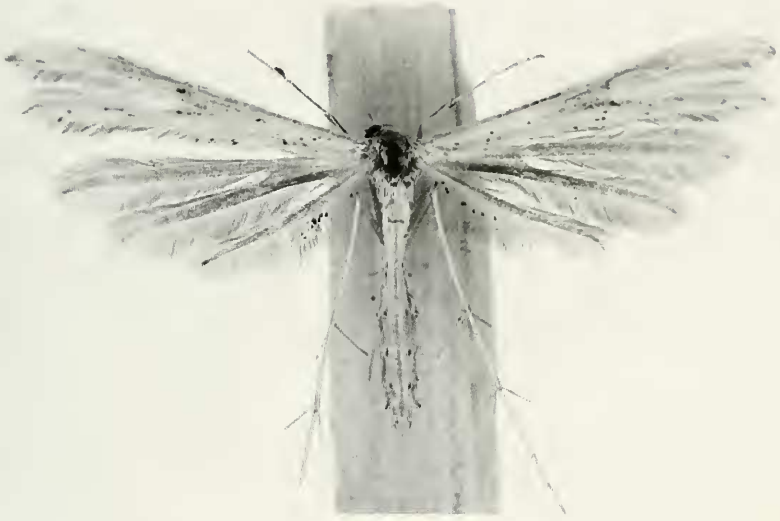

FIG. 20
Exelastis vuattouxi Bigot. Imago. Ht. Katanga, Tshinkolobwe, 29.IX.[19]30, J. Romieux.

FIG. 21
Exelastis pilum sp. n. holotype. Imago. Ht. Katanga, Tantara, 10.X.[19]31, J. Romieux.

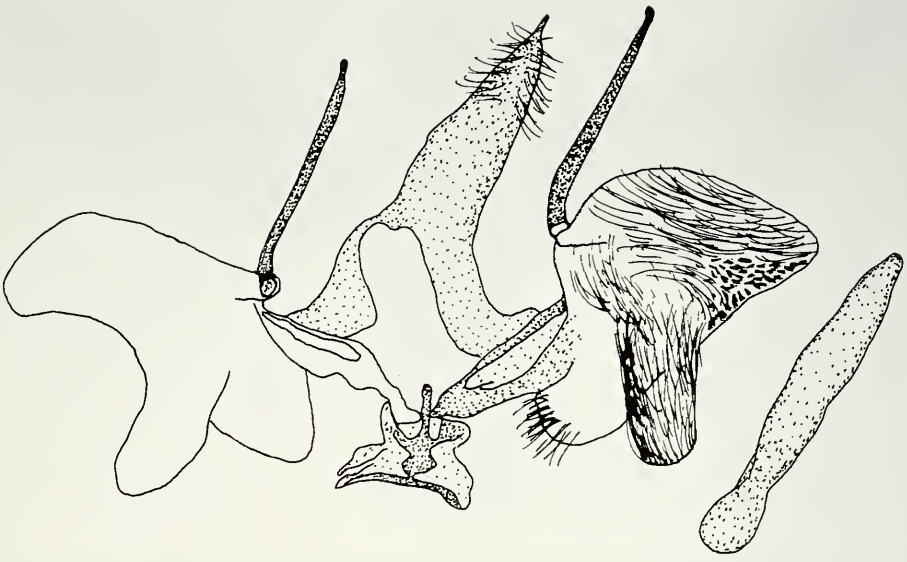

FIG. 22

Exelastis pilum sp. n.. holotype. Male genitalia. Ht. Katanga, Tantara, 10.X.[19]31, J. Romieux, Gent. prep. Gielis 5830.

DIAGNOSIS: The species is characterized by the spiny processes on the right and left valves of the male genital structure.

DESCRIPTION: Wingspan 19 mm. Head with some erect scales, ochreous-white, pale ochreous between base of antennae. Labial palpus ochreous-white, protruding, second segment slightly thickened by scales, just longer than eye-diameter. Antenna brown and ochreous-white scaled, shortly ciliated. Thorax and tegula too descaled to be described. Abdomen ochreous-white. Legs pale ochreous-white.

Fore wing cleft from 9/15th, pale grey-white. Spots pale ochreous: a discal spot, a pair of spots just before base of cleft, and diffuse scaling along costa. Fringes pale grey, with dark grey patches at anal angle of second lobe, and at terminal 1/3rd of cleft; basally positioned dark scales at termen of both lobes. Underside pale ochreous, whitish in both lobes.

Hind wing very pale grey-brown, pale grey-white in terminal half of first lobe. Fringes pale grey-brown. With some pale grey scales at apex of first and second lobe. Underside pale ochreous, whitish mixed in terminal half of first, second and entire third lobe. Venous scales ferruginous, in double row, costal row longer.

MALE GENITALIA: Valves symmetrical; basally slender, followed by basal lobe, terminally large and crescent shaped. Dorsal edge with large spine, almost half as long as valve. Uncus simple, acute. Anellus arms short. Saccus broad. Phallus straight, slightly tapering. Vesica without cornutus.

FEMALE GENITALIA: Unknown.

ECOLOGY: The single specimen known was flying in October. The host plant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga.

ETYOLOGIE: The name *pilum* (= javelin, spear) reflects the spine-like process on the dorsal edge of the valva in the male genitalia.

Antarches aguessei (Bigot, 1964) Fig. 23

Oxyptilus aguessei Bigot, 1964: 178. TL: Guinea.

MATERIAL: 1 ♂, Haut-Katanga, Panda, 6.II.[19]30, Gent. prep. Gielis 5833. – 1 ♂, Haut-Katanga, Tshinkolobwe, 4.II.[19]31. – 1 ♀, Haut-Katanga, Tshituru, 15.XII.[19]29.

REMARKS: Known from Cameroun, Guinea, Tanzania.

Capperia insomnis (Townsend, 1956) Fig. 24

Capperia insomnis Townsend, 1956: 93. TL: Kenya.

MATERIAL: 1 ♀, Haut-Katanga, Panda, 15.II.[19]30, Gent. prep. Gielis 5839.

REMARKS: Recorded hostplants are in the family Lamiaceae (Matthews & Lott, 2005). So far only known from the type series, from Kenya.

Stenodacma cognata sp. n. Figs 25-26

MATERIAL: Holotype ♂, '[Democratic Republic of the Congo] Ht Katanga | Tshinkolobwe| 9.10.[19]30 | J. Romieux' , 'MHNG Prep. micr. | No 1323 ♂' , 'HOLOTYPE | Stenodacma | cognata | Gielis' (red label) (MHNG). – Paratype (blue label): 1 ♂, 'Tanzania, Mpanda, 57 km S Uvinza, on Mpanda road, 1700 m, 3.VIII.1990, L. Aarvik' , 'Gent. prep. Gielis 4463' (NHMO).

DIAGNOSIS: The species is characterized by the slender bifid uncus, and the distinct cucullar process on both valves in the male genitalia.

DESCRIPTION: Wingspan 15-17 mm. Head appressedly scaled, pale orange-brown. Collar with some erect bifid scales. Labial palpus protruding, pale orange-brown, second segment slightly thickened by scales. Antenna with longitudinal rows of dark brown and whitish scales. Thorax, tegula and mesothorax pale orange-brown, on caudal parts of thorax and tegulae mixed with whitish scales. Legs pale ochreous-white, at the base of the spurs thickened with bristles of orange-brown scales.

Fore wing cleft from 3/7th, pale orange-brown with both lobe tips acute. With brown spot at base of cleft, and costal dash in middle of first lobe; with faint pale transverse band in middle of both lobes. Fringes pale orange-brown, terminal 1/6th in cleft whitish on dorsum of first and costa of the second lobe. Dark brown fringe scales at the dorsum of the first lobe at 2/3rd and near base, at costa of second lobe at 2/3rd, and with small scale teeth at dorsum of second lobe at 1/2, 2/3rd, 3/4th, 4/5th, and subterminal. Underside pale orange-brown; with pale markings as upperside.

Hind wing and fringes orange-brown. Along dorsum of third lobe with large scale tooth at 2/3rd, and small subapical; with scattered white scales from base til 3/4th. Underside pale orange-brown. Venous scales dark ferruginous, in double row, costal row longer.

FIG. 23
Antarches aguessei Bigot. Imago. Ht. Katanga, Panda, 6.II.[19]30, J. Romieux.

FIG. 24
Capperia insomnis Townsend. Imago. Ht. Katanga, Panda, 15.II.[19]30, J. Romieux.

FIG. 25
Stenodacma cognata sp. n. holotype. Imago. Ht. Katanga, Tshinkolobwe, 9.X.[19]30, J. Romieux.

MALE GENITALIA: Valvae symmetrical, lanceolate, with basally positioned saccular ridge. With basal cucullar process, almost half of valve's length, with knob-like tip. Tegumen arched. Uncus long, slender, bifid. Anellus arms small and slender. Saccus knob-like. Phallus slightly curved, gradually tapering; vesica without cornutus.

FEMALE GENITALIA: Unknown.

ECOLOGY: The moth flies in August and October. In Tanzania the species occurs at an altitude of 1700 meters. The hostplant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga; Tanzania: Mpanda.

ETYMOLOGY: The name *cognata* (= related to) reflects the similarity between the present species and *Stenodacma wahlbergi* (Zeller, 1851) in the shape of the genitalia, especially the double uncus.

Buckleria girardi Gibeaux, 1992 Fig. 27

Buckleria girardi Gibeaux, 1992: 14. TL: Guinea

MATERIAL: 1 ♂, Haut-Katanga, Tshinkolobwe, 19.III.[19]31, Gent. prep. Gielis 5826.

REMARKS: So far only known from the holotype, from Guinea.

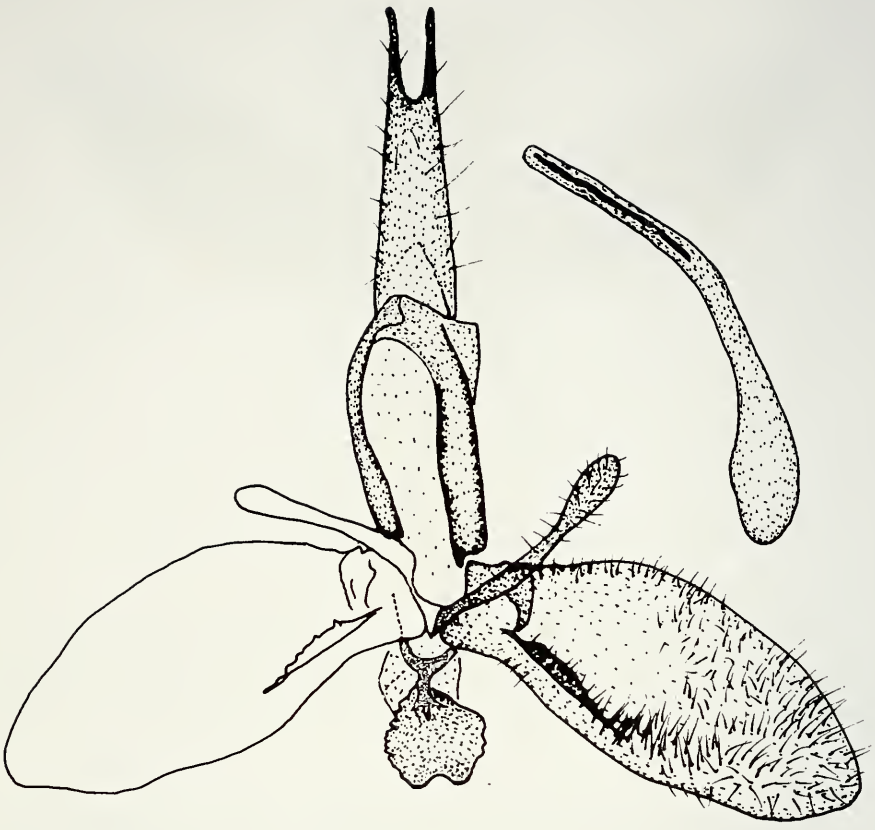

FIG. 26

Stenodacma cognata sp. n. paratype. Male genitalia.Tanzania, Mpanda, 57 km S Mpanda, Uvinza, on Mpanda road, 1700 m, 3.VIII.1990, L. Aarvik, Gent. prep. Gielis 4463.

Trichoptilus vivax Meyrick, 1909 Fig. 28

Trichoptilus vivax Meyrick, 1909: 1. TL: Republic of South Africa.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 22.VIII.[19]31, 8.X.[19]30. – 1 ♂, Haut-Katanga, Panda, 22.I.[19]30, Gent. prep. Gielis 5840.

REMARKS: Known from Rep. of S. Africa, Namibia and Gambia.

Megalorhipida leptomeres (Meyrick, 1886) Fig. 29

Trichoptilus leptomeres Meyrick, 1886: 15. TL: Reunion Island.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 6.VI.[19]31, 22.VII.[19]31, Gent. prep. Gielis 5841 (♀).

REMARKS: Known from Oman, Yemen, Kenya, Tanzania, Rep. of S. Africa, DR Congo, Madagascar, Seychelles and Réunion Island.

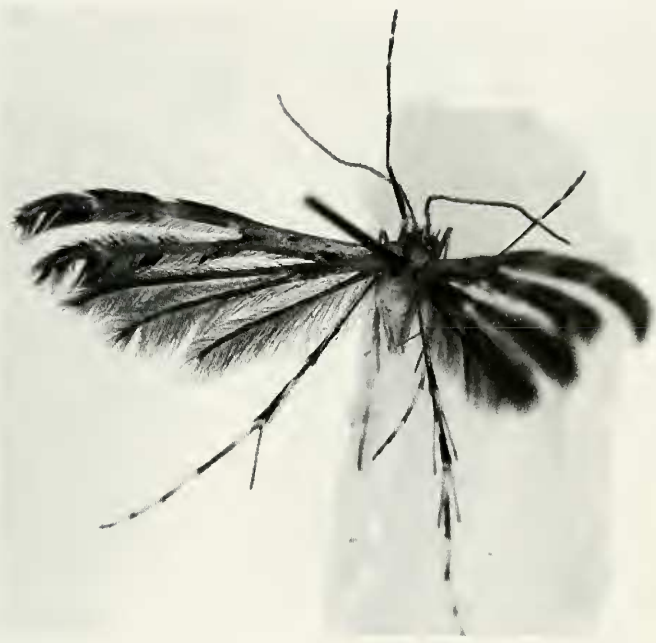

FIG. 27
Buckleria girardi Gibeaux. Imago. Ht. Katanga, Tshinkolobwe, 19.III.[19]31, J. Romieux.

FIG. 28
Trichoptilus vivax Meyrick. Imago. Ht. Katanga, Tshinkolobwe, 8.X.[19]30, J. Romieux.

FIG. 29
Megalorhipida leptomeres (Meyrick). Imago. Ht. Katanga, Tshinkolobwe, 6.VI.[19]31, J. Romieux.

Hellinsia ecstaticus (Meyrick, 1932) Fig. 30

Pterophorus ecstaticus Meyrick, 1932: 335. TL: Uganda.

MATERIAL: 2 ♂♂, 1 ♀, Haut-Katanga, Kyala, 19.VII.[19]29, 24.VII.[19]29, 25.VII.[19]29, prep. MHNG 1320 (♀), 1324 (♂) (MHNG, CG).

REMARKS: Known from Uganda, Kenya and Tanzania.

Hellinsia katangae sp. n. Figs 31-32

MATERIAL: Holotype ♂, '[Democratic Republic of the Congo] Ht Katanga | Tshinkolobwe | 13.3.[19]31 | J. Romieux', 'MHNG ENTO 00005490', 'Gent. prep. | Gielis | nr. 5843', 'HOLOTYPE | Hellinsia | katangae | Gielis' (red label) (MHNG). – Paratype (blue label): ♂, 'Ø. Kongo, Kafho, N. f. Rutshuru, 13.XII.1946, Univ. Centralafr. Exp. 1946-47', 'Gent. prep. Gielis 4022' (ZMUC).

DIAGNOSIS: The species is characterized by the pale bone colour, and particularly by the rounded blunt tip in the right valve of the male genitalia.

DESCRIPTION: Wingspan 15 mm. Head, thorax, abdomen and legs bone-white. Labial palpus curved up, bone-white, as long as eye-diameter. Antenna bone-white, shortly ciliated. Hind leg with two pairs of spurs, proximal pair of unequal length, distal pair shorter than shortest of proximal pair and of almost equal length.

Fore wings cleft from middle. Colour of wing and fringes bone-white; marking pale brown, in shape of a half crescent around base of cleft. Underside pale brown, pattern as upperside.

FIG. 30
Hellinsia ecstaticus (Meyrick). Imago. Ht. Katanga, Kyala, 24.VII.[19]29, J. Romieux.

FIG. 31
Hellinsia katangae sp. n. holotype. Imago. Ht. Katanga, Tshinkolobwe, 13.III.[19]31, J. Romieux.

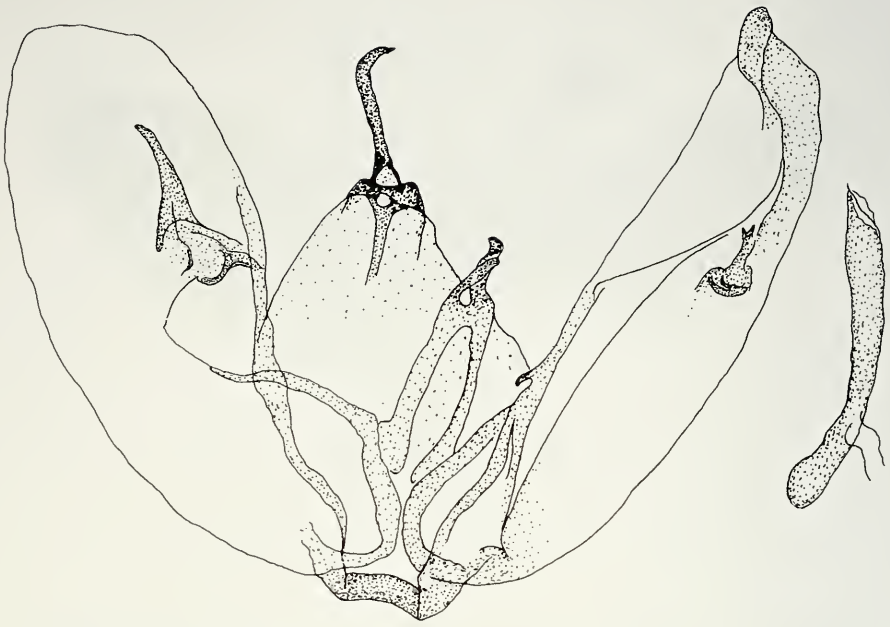

FIG. 32

Hellinsia katangae sp. n. holotype. Male genitalia. Ht. Katanga, Tshinkolobwe, 13.III.[19]31, J. Romieux, Gent. prep. Gielis 5843.

Hind wing on both sides and fringes silvery-white. Venous scales blackish, in double row, costal row extending into second lobe.

MALE GENITALIA: Valves asymmetrical. Left valve with saccular spine of 1/4th of valve length, with base at 2/3rd of valve. Right valve with small saccular process at slightly beyond middle of valve, and curved blunt tipped process apically. Tegumen bi-lobed. Uncus short and slender. Juxta with short anellus arms. Saccus narrow, simple. Phallus slightly curved, with acute tip.

FEMALE GENITALIA: Unknown.

ECOLOGY: The moth flies in March and December. The hostplant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga, Rutshuru.

ETYMOLOGY: The species is named after the region of its occurrence, Katanga.

REMARKS: The species belongs to the *Hellinsia pectodactylus*-group, differing in the shape of the tip of the right valve.

Hellinsia bengtssoni sp. n. Figs 33-34

MATERIAL: Holotype ♂, '[Democratic Republic of the Congo] Ht Katanga | Sakania | 16.12.[19]31 | J. Romieux', 'MHNG ENTO 00005491', 'Gent. prep. | Gielis | nr. 5854', 'HOLOTYPE | Hellinsia | bengtssoni | Gielis' (red label) (MNHG).

FIG. 33
Hellinsia bengtssoni sp. n. holotype. Imago. Ht. Katanga, Sakania, 16.XII.[19]31, J. Romieux.

DIAGNOSIS: The species is characterized by the male genital structure, in which the valves have extensions of the margins and apex, not found in other species of this genus.

DESCRIPTION: Wingspan 23 mm. Head appressedly scaled, pale ochreous. Labial palpus protruding, pale ochreous, one and a half times eye-diameter. Antenna pale ochreous, shortly ciliated. Thorax, tegula, and legs pale ochreous. Mid leg with dark brown longitudinal scale lines along femora and tibia; hind leg with longitudinal dark brown scale patches on tibia. Hind leg with two pairs of spurs, with proximal pair longer, individual spurs laterally dark brown, medially pale ochreous.

Fore wing cleft from 3/5th, pale ochreous. Markings darker ochreous tinged: at base until 1/10th; from base of costal to just before base of cleft; at dorsum of second lobe; and diffusely in first lobe. Fringes pale ochreous. Underside pale brown, in lobes mixed with white.

Hind wing pale brown. Fringes pale ochreous, darker apically. Underside grey-brown. Venous scales dark ferruginous, in double row, costal row with linear patch in second lobe.

MALE GENITALIA: Valves asymmetrical. Left valve long, centrally narrowed; with extensions on ventral margin at 2/3rd; on dorsal margin at 4/5th, and apically. Right valve shorter than left one, with narrow section at 2/5th and extension dorsally at 3/5th and apically. Tegumen simple. Uncus double, short and stout. Saccus narrow. Phallus slightly curved, with acute tip.

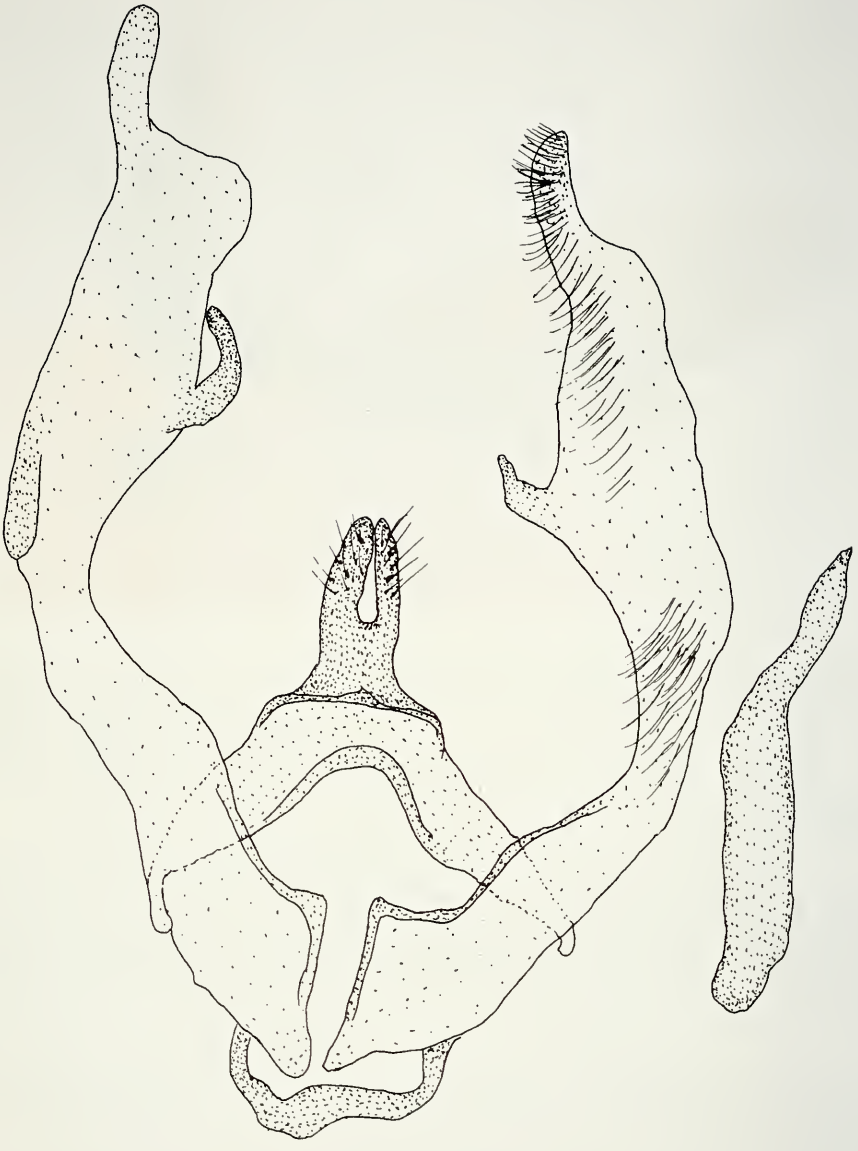

FIG. 34

Hellinsia bengtssoni sp. n. holotype. Male genitalia. Ht. Katanga, Sakania, 16.XII.[19]31, J. Romieux, Gent. prep. Gielis 5854.

FEMALE GENITALIA: Unknown.

ECOLOGY: The single specimen known was flying in December. The hostplant is unknown.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga.

ETYMOLOGY: The species is named after Dr. Bengt Å. Bengtsson, to honour his knowledge of the microlepidopteran fauna of the Old World, and his for warm friendship.

Hellinsia timidus (Meyrick) Fig. 35

Pterophorus timidus Meyrick, 1908: 494. TL: Republic of South Africa.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Tshinkolobwe, 20.I.[19]31, 14.XII.[19]30, Gent. prep. Gielis 5855(♂), 5860 (♀) (MHNG). – 2 ♂♂, Haut-Katanga, Sakania, 16.I.[19]32, 18.I.[19]32, Gent. prep. Gielis 5836 (MHNG, CG).

REMARKS: Known from the Rep. of S. Africa.

Hellinsia punctata sp. n. Figs 36-37

MATERIAL: Holotype ♂: '[Democratic Republic of the Congo] Ht Katanga | Tshinkolobwe | 4.4.[19]31 | J. Romieux' , 'MHNG ENTO 00005494' , 'HOLOTYPE | Hellinsia | punctata | Gielis' (red label) (MHNG). – Paratypes (blue label): 3 ♂♂, Haut-Katanga, Tshinkolobwe, 22.1.[19]31, 14.4.[19]31, 20.4.[19]31, Gent. prep. Gielis 5838, 5842, 5845 (♂) (MHNG, CG).

DIAGNOSIS: The species is characterized by the strongly developed punctation along the costal and dorsal margin of the fore wing and the distinct male genital structure with a single arched, small saccular spine in the left valve and a short bifid saccular spine in the right valve.

DESCRIPTION: Wingspan 13-17 mm. Head pale ochreous-brown; creamy-white between base of antennae; appressedly scaled. Collar ochreous. Labial palpus very thin and slender, curved up, pale ochreous, 3/4th of eye diameter. Antenna ochreous, shortly ciliated. Thorax, tegula, and abdomen pale ochreous. Abdomen dorsally with two longitudinal yellow-ochreous lines. Fore and mid leg ochreous with longitudinal dark brown lines on femora and tibia. Hind leg ochreous; with two pairs of spurs of equal length.

Fore wing cleft from middle; pale ochreous whitish along costa and dorsum. Markings dark brown: diffuse scaling at basal 1/5th of dorsum; small discal spot; double spot at base of cleft, dorsal one bigger; three spots at the dorsum of second lobe, central one bigger and more elongate; another spot at dorsum of first lobe at 3/4th, elongate; and minute spot on costa of first lobe. Fringes pale ochreous. Underside pale brown, with spots as upperside.

Hind wing and fringes pale ochreous-brown, with a small brown spot at tips of lobes. Underside pale brown. Venous scales black, in two continuous rows, costal row longer.

MALE GENITALIA: Valves asymmetrical. Left valve with spiny saccular process of 1/4th of valve length, originating from 1/4th of length. Right valve with small double process at 1/3rd of valve length. Tegumen bilobed. Uncus moderate, slender. Juxta with two short and stout anellus arms. Saccus rather wide, ribbon-like. Phallus mildly curved, with cornuti as diffuse thickening.

FEMALE GENITALIA: Unknown.

ECOLOGY: The moth flies in January and April. The hostplant is unknown.

FIG. 35
Hellinsia timidus (Meyrick). Imago. Ht. Katanga, Sakania, 16.I.[19]32, J. Romieux.

DISTRIBUTION: Democratic Republic of the Congo: Haut-Katanga.

ETYMOLOGY: The name reflects the strong punctation along the fore wing margins.

Paulianilus madecasseus (Bigot, 1964) Fig. 38

Pterophorus madecasseus Bigot, 1964: 34. TL: Madagascar.
Leioptilus devius Bigot, 1969: 197.

MATERIAL: 4 ♂♂, 6 ♀♀, Haut-Katanga, Tshinkolobwe, 5.I.[19]31, 23.I.[19]31, 5.V.[19]31, 25.V.[19]31, 27.VII.[19]30, 3.VIII.[19]30, 6.VIII.[19]30, 3.X.[19]30, 15.XII.[19]30, Gent. prep. Gielis 5837 (♂) (MHNG, CG). – 1 ♀, Haut-Katanga, Panda, 20.VI.[19]29.

REMARKS: Known from DR Congo, Tanzania and Madagascar.

Emmelina amseli (Bigot, 1969) Fig. 39

Leioptilus amseli Bigot, 1969: 198. TL: Democratic Republic of the Congo.

MATERIAL: 1 ♂, 3 ♀♀, Haut-Katanga, Kyala, 2.VII.[19]29, 4.VII.[19]29, 16.VII.[19]29, 22.VIII.[19]29, Gent. prep. Gielis 5831 (♂).

REMARKS: Knowns from DR Congo, Kenya and Tanzania.

FIG. 36

Hellinsia punctata sp. n. holotype. Imago. Ht. Katanga, Tshinkolobwe, 4.IV.[19]31, J. Romieux.

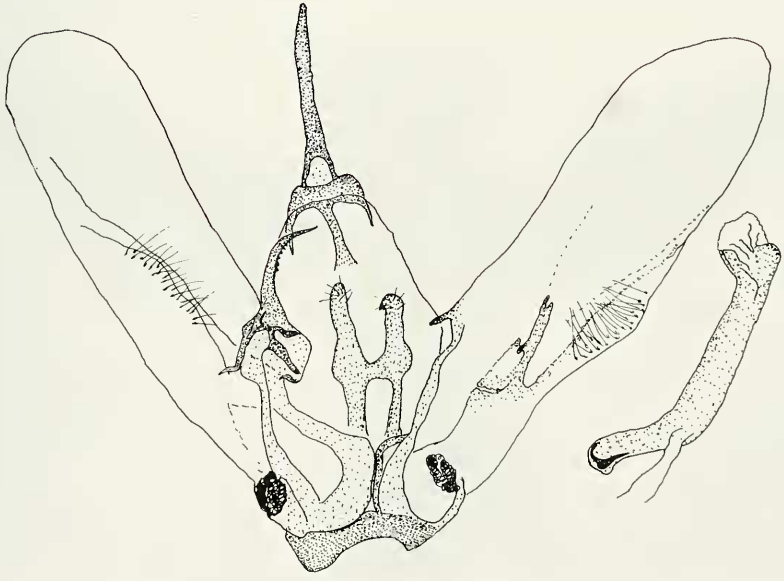

FIG. 37

Hellinsia punctata sp. n. paratype. Male genitalia. Ht. Katanga, Tshinkolobwe, 22.I.[19]31, J. Romieux, Gent. prep. Gielis 5842.

FIG. 38
Paulianilus madecasseus (Bigot). Imago. Ht. Katanga, Tshinkolobwe, 15.XII.[19]30, J. Romieux.

FIG. 39
Emmelina amseli Bigot. Imago. Ht. Katanga. Kyala. 2.VII.[19]29, J. Romieux.

FIG. 40
Adaina microdactyla (Hübner). Imago. Ht. Katanga, Tshinkolobwe, 24.XII.[19]30, J. Romieux.

FIG. 41
Pterophorus ischnodactyla (Treitschke). Imago. Ht. Katanga, Panda, 10.II.[19]30, J. Romieux.

Adaina microdactyla (Hübner, [1813]) Fig. 40

Alucita microdactyla Hübner, [1813]: pl. 5, figs. 26, 27. Europe.
Pterophorus carphodactylus Step¬hens, 1834: 374.
Adaina montivola Meyrick, 1937: 170.
Adaina subflavescens Meyrick, 1930: 568.
Oidaematophorus madecasseus Gibeaux, 1994: 130. syn. n.

MATERIAL: 2 ♀♀, Haut-Katanga, Tshinkolobwe, 4.XII.[19]30, 24.XII.[19]30, Gent. prep. Gielis 5834, 5844; 1 ♀, Haut-Katanga, Panda, 13.XII.[19]29.

REMARKS: Recorded hostplants are in Asteraceae, Brassicaceae, and Rosaceae (Matthews & Lott, 2005).

Known from the palaearctic, south-east Asian, Australian regions and DR Congo, Tanzania and Madagascar.

After checking the genital structures of the *Oidaematophorus madecasseus* Gibeaux specimen described and illustrated by Gibeaux (1994), it became obvious this species has to be transferred to the present genus, and that the genital structures are the same as in *A. microdacyla* Hübner. The bursa copulatrix is stretched, as often happens in preparing the genital slide, but the twists are still well recognizable.

Pterophorus ischnodactyla (Treitschke, 1833) Fig. 41

Alucita ischnodactyla Treitschke, 1833: 223. TL: Hungary.
Aciptilia actinodactyla Chrétien, 1891: 99.
Aciptilia eburnella Amsel, 1968: 14.

MATERIAL: 1 ♂, 1 ♀, Haut-Katanga, Panda, 10.II.[19]30, prep. MHNG 1310 (♂) (MHNG, CG).

REMARKS: Recorded hostplants are in Convolvulaceae, Lamiaceae, and Rosaceae (Matthews & Lott, 2005).

Known from the warmer zone in the palaearctic region and Rep. of S. Africa.

ACKNOWLEDGEMENTS

I wish to thank Mr H.W. van der Wolf for his linguistic help.

REFERENCES

BIGOT, L. 1969. Les lépidoptères Pterophoridae du Musée Royal de l'Afrique Centrale, à Tervuren. *Revue de Zoologie et de Botanique Africaines* 79: 165-206.

GIELIS, C. 1993. Generic revision of the superfamily Pterophoroidea. *Zoologische Verhandelingen, Leiden* 290: 1-139, figs. 1-241.

GIELIS, C., 2003. *World catalogue of Insects, 4: Pterophoroidea & Alucitoidea.*- pp. 198. Apollo Books, Stenstrup.

MATTHEWS, D. L. & LOTT, T. A. 2005. Larval hostplants of the Pterophoridae. *Memoirs of the American Entomological Institute* 76: 1-324.

REHFORS, M. 1952. Jean Romieux, entomologiste, 1893-1951. *Bulletin de la Société entomologique Suisse* 25: 56.